

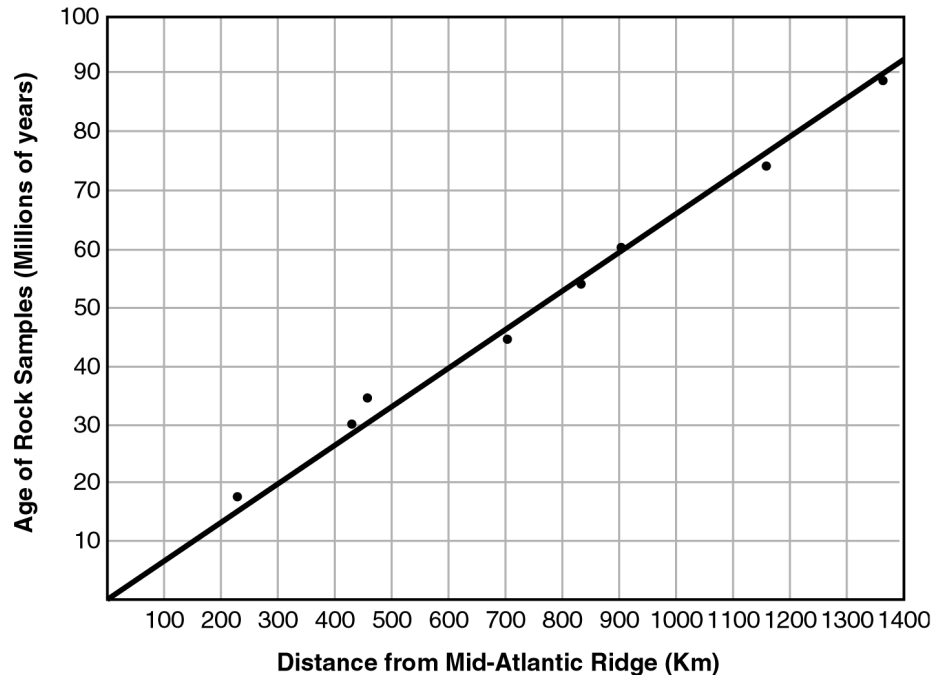
# Seafloor Spreading

## Enrichment Activity

**Skills:** *interpreting, organizing, recording data*

Deep-sea drilling has brought up rock samples from the ocean floor. Scientists have measured the ages of these rock samples. Some of their measurements are shown in the graph below. Use the information in the graph to answer the following questions.

1. About how old are rock samples found 700 km from the Mid-Atlantic Ridge? \_\_\_\_\_
2. About how old are rock samples found 425 km from the Mid-Atlantic Ridge? \_\_\_\_\_
3. How many kilometers from the Mid-Atlantic Ridge are rock samples that are 75 million years old? \_\_\_\_\_



4. What is the relationship between the age of rocks on the ocean floor and their distance from the Mid-Atlantic Ridge? \_\_\_\_\_  
\_\_\_\_\_
5. What generalization can you make about the ages of rocks that are close to the Mid-Atlantic Ridge? \_\_\_\_\_  
\_\_\_\_\_
6. How does seafloor spreading explain why the youngest rocks are found near the Mid-Atlantic Ridge? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Would you expect a rock sample found 1,500 km from the Mid-Atlantic Ridge to be younger or older than 90 million years? Explain. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Answer Key

## Seafloor Spreading Enrichment Activity

1. 45 million years 2. 30 million years 3. 1,150 km  
4. As age increases, distance from the mid-ocean ridge increases. 5. New ocean floor is constantly being formed at the mid-ocean ridge. 6. Below the mid-ocean ridges, magma rises through the crust. As the magma cools, it forms new crust on both sides of a rift. The new crust pushes the seafloor apart at the ridges. 7. Rocks found 1,300 km from the mid-ocean ridge are about 90 million years old. Rocks found farther away would be older.